

I claim:

5 1. A process for browning precooked, whole muscle meat products comprising:
coating a browning liquid pyrolysis product onto at least a portion of the surface of
whole muscle meat product; and then

10 exposing the coated surface to an energy source creating an environment having a
temperature greater than about 400° C for a time sufficient to selectively heat the coated
surface of the whole muscle meat product and develop a golden-brown to mahogany-brown
color on the exposed surface, without substantial shrinking the precooked, whole muscle
meat product.

15 2. The process in accordance with claim 1 wherein the precooked, whole muscle
meat product is selected from poultry, meat, and fish products.

20 3. The process in accordance with claim 2 wherein the precooked, whole muscle
meat product is a precooked turkey breast or a precooked chicken breast.

25 4. The process in accordance with claim 2 wherein the browning liquid
pyrolysis product is obtained from the pyrolysis of hardwoods or sugars.

30 5. The process in accordance with claim 4 wherein the browning liquid
pyrolysis product is obtained from the pyrolysis of dextrose.

25 6. The process in accordance with claim 4 wherein the amount of browning
liquid ranges from about 0.05 to about 1.0 wt. %, based on the weight of the precooked,
whole muscle meat product.

30 7. The process in accordance with claim 6 wherein the amount of browning
liquid ranges from about 0.1 to about 0.8 wt. %, based on the weight of the precooked,
whole muscle meat product.

8. The process in accordance with claim 2 further comprising the browning liquid pyrolysis product contains a masking agent or flavoring enhancing composition.

5 9. The process in accordance with claim 3 further comprising the browning liquid pyrolysis product contains from about 0.5 to about 15 wt. % turkey flavor or turkey broth or a mixture of the two.

10 10. The process in accordance with claim 2 wherein the energy source is an infrared radiation source.

11. The process in accordance with claim 10 wherein the energy source selectively heats the surface of the meat product by creating an environment having a temperature from about 425° C to about 700°C.

15 12. The process in accordance with claim 11 wherein the energy source selectively heats the surface of the meat product by creating an environment having a temperature from about 450°C to about 650°C.

20 13. The process in accordance with claim 1 wherein the coated surface is exposed to the energy source for one minute or less.

25 14. The process in accordance with claim 2 further comprising prior to exposing the meat product to the energy source, the temperature at the core of the meat product is less than about 5° C and immediately after browning the meat product, the temperature at the core of the meat product is less than about 8°C.

30 15. The process in accordance with claim 13 wherein prior to exposing the meat product to the energy source, the temperature at the core of the meat product is less than about 5° C and immediately after browning the meat product, the temperature at the core of the meat product is less than about 5°C.

16. A process for browning a precooked chicken breast or a turkey breast comprising:

coating at least a portion of the surface of a chicken breast or a turkey breast with from about 0.05 to about 1.0 wt. %, based on the weight of the breast, of a browning liquid pyrolysis product obtained from hardwoods or sugars to a breast; and then

5 selectively heating the coated surface of the breast in an environment having a temperature greater than about 425°C with energy provided by an infra red radiation source for one minute or less.

10 17. The process in accordance with claim 16 wherein the precooked breast is a precooked turkey breast.

15 18. The process in accordance with claim 17 wherein the browning liquid pyrolysis product is obtained from the pyrolysis of dextrose.

19. The process in accordance with claim 18 wherein the amount of browning liquid ranges from about 0.15 to about 0.3 wt. %, based on the weight of the breast.

20 20. The process in accordance with claim 18 further comprising the browning liquid pyrolysis product contains a masking agent or flavoring enhancing composition.

21. The process in accordance with claim 20 further comprising the browning liquid pyrolysis product contains from about 0.5 to about 15 wt. % turkey flavor or turkey broth or a mixture of the two.

25 22. The process in accordance with claim 16 wherein the energy source selectively heats the surface of the breast by creating an environment having a temperature from about 450°C to about 650°C.

23. The process in accordance with claim 16 further comprising prior to exposing the meat product to the energy source, the temperature at the core of the meat product is less than about 5° C and immediately after browning the meat product, the temperature at the core of the meat product is less than about 8° C.

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24. The process in accordance with claim 23 wherein prior to exposing the meat product to the energy source, the temperature at the core of the meat product is less than about 5° C and immediately after browning the meat product, the temperature at the core of the meat product is less than about 5° C.

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25. The process in accordance with claim 1 wherein the shrinkage of the precooked, whole muscle meat product is less than 4 wt. % based on the initial weight of the meat product.

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26. The process in accordance with claim 1 wherein the shrinkage of the precooked, whole muscle meat product is less than 1 wt. % based on the initial weight of the meat product.

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27. The process in accordance with claim 16 wherein the shrinkage of the precooked, whole muscle meat product is less than 1 wt. % based on the initial weight of the meat product.

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28. The process in accordance with claim 1 wherein the whole muscle meat product has protrusions on its surface caused by precooking in a net.

P A T E N T E D U M B R A L L E G O

29. The process in accordance with claim 16 wherein the whole muscle meat product has protrusions on its surface caused by precooking in a net.

30. A process for browning precooked, whole muscle meat products comprising:
precooking a whole muscle meat product in a netting bag;
removing the bag;
coating a browning liquid pyrolysis product onto at least a portion of the surface of
the precooked whole muscle meat product; and then

exposing the coated surface to an energy source and selectively heating the coated surface of the whole muscle meat product at a temperature and for a time sufficient to develop a golden-brown color on the exposed surface, without substantial shrinking the precooked, whole muscle meat product.